

XXVIII. *On some new species of Rhopalocera from Southern Africa.* By ROLAND TRIMEN, F.L.S., &c., Curator of the South-African Museum, Cape Town.

[Read August 3rd, 1881.]

The butterflies here treated of are the following, viz. :—

<i>Acræa Barberi</i> ,	<i>Crenis Morantii</i> ,
<i>Acræa fenestrata</i> ,	<i>Salamis nebulosa</i> ,
<i>Leptoneura Oxylus</i> ,	<i>Lycænesthes livida</i> .

All are natives of the extra-tropical region of Southern Africa, and only *Salamis nebulosa* appears to extend within tropical limits. I propose to give figures of these species, as well as of others which will form the subject of a further communication to the Society, in the work which I am preparing on the South-African *Rhopalocera* generally.

NYMPHALIDÆ.

ACRÆINÆ.

ACRÆA, *Fab.*

Acræa Barberi, n. s.

Exp. al. 2 in. $5\frac{1}{2}$ — $9\frac{1}{2}$ lin. (male); 3 in. 2 lin. (female).

♂. Warm brick-red, tinged with carmine; spotted and edged with black. Fore wing:—base suffused with black, narrowly near costa, but more widely on inner margin; costa edged with fuscous very narrowly; from apex to posterior angle a broad hind-marginal fuscous border, containing seven large yellow-ochreous spots, of which the first is smallest, and the second not enclosed by fuscous on its inner edge; a large elongate spot closing discoidal cell; a similar marking in the cell not far from the extremity, and another (of variable size and rounded) in the cell near base; slightly beyond the last-named spot, and below median nervure, a curved elongate spot, and another (also below median nervure) between first and second median nervules; a spot below first median nervule, not far from posterior angle;

beyond discoidal cell a subapical transverse black bar of five confluent spots, extending from costa to second median nervule, and slightly curving inwardly at its lower extremity; beyond this the ground colour is slightly tinged with yellow-ochreous. Hind wing:—Base rather widely suffused with black, a disco-cellular spot being partly confluent with the suffusion; a small spot surmounted by a thin short streak at extremity of discoidal cell; an irregular transverse discal row of seven rather small spots, of which the first and sixth are nearest base; on inner margin an eighth spot is indistinctly perceptible; a moderately broad interiorly-crenelated hind marginal black border, completely enclosing seven rather small yellow-ochreous spots. Cilia white, interrupted with fuscous at extremities of nervules. Under side:—Markings similar; but hind wing and small subapical space of fore wing pinkish white, and ground colour of fore wing pale salmon-pink. Fore wing:—Base slightly suffused with black below median nervure only; two very small black spots on costa at base, and a third (very small also) close to base in discoidal cell. Hind wing:—The basal black is a sharply-defined patch enclosing six white spots; an eighth and a ninth black spot continue the discal row to inner-marginal edge before middle; a regular row of seven or eight broad red lunulate marks interiorly bounding hind-marginal black border; also some red suffusion exteriorly bounding basal black; spots in hind-marginal border larger than on upper side, and conspicuously creamy white.

♀. Semitransparent in fore wing; ground colour very much duller and paler; basal black almost obsolete; all the blackish markings smaller and much fainter, especially the hind-marginal border of hind wing, which is all but obsolete. Under side:—Except in the transparency of the fore wing with its fainter spots and duller white of the hind wing, like that of male.

This *Acræa* stands between *A. Acara*, Hewitson, and *A. Chilo*, Godman (Proc. Zool. Soc. Lond., 1880, p. 184, pl. xix., figs. 4, 5), a native of Abyssinia. It differs from the former in its much less developed black markings (particularly the basal black of both wings, and the subapical bar and apical border of the fore wing), and in the apical yellow-ochreous of the fore wing being very much fainter. In the female these

differences are as marked as in the male, but the former is also distinguished by the remarkable transparency of the fore wing. From *A. Chilo*, on the contrary, *A. Barberi* is in both sexes distinguishable by its stronger black markings (with the exception of the inner edge of the fuscous hind-marginal border of the fore wing in the male and of both wings in the female, which in *A. Chilo* is unbroken near apex of fore wing)), and in the female by the much less transparency of the fore wing. The under side markings and colouring of *A. Barberi* agree entirely with those of *A. Acara*, except that the former are smaller.

I have named this butterfly after its discoverer, Mr. H. Barber, who captured the two males and the female here described in the Transvaal country during the year 1873. Mr. Barber collected a number of species in that region, but did not note localities further than stating that all were taken to the North of Pretoria.

To this species, I consider, should be referred two butterflies received at the South-African Museum, *viz.*, a male taken on the Vaal River by Col. J. H. Bowker, and a female forwarded from some part of the Transvaal by Mr. D. Arnot. These examples are clearly referable to one and the same variation, both having the apical yellow-ochreous of fore wing more pronounced, while the interior fuscous edging of the hind marginal border is almost obsolete. In the male this last-named character extends in a less marked degree to the hind wing; while in the female the peculiar transparency is not noticeable, the wings being quite as opaque as in ordinary females of *A. Acara*.

Acræa fenestrata, n. s.

Exp. al. 2 in. 2 lin. (male).

♂. Warm fulvous-ochreous, inclining to rufous, with narrow black borders and a few black spots. Fore wing:—Base very narrowly marked with black, which extends for a little distance along inner margin; costa very thinly black-edged from near base, but more widely near apex; hind margin narrowly black-edged throughout, and all the nervules near it clearly defined with black—those near apex for the greatest length, and the submedian nervure least of all; basal area thinly irrorated with black; in discoidal cell near extremity a moderate-sized reniform spot; at extremity an elongate and more

irregular marking of about the same size ; a little beyond the cell, between subcostal nervure and third median nervule, an oblique row of three small rounded contiguous spots ; immediately bounding the second and third spots of this row externally, two small elongate transparent markings with ill-defined edges ; below the third spot of the row, and well separated from it, a very small rounded black spot, between third and second median nervules ; a similar slightly larger spot between median and submedian nervures, on edge of basal irroration ; and a third, larger and not so rounded, between first median nervule and submedian nervure beyond middle. Hind wing :—Base more widely marked with black than in fore wing ; black spots very small and few in number, *viz.*, two in discoidal cell (that near base confounded with black suffusion) ; one on upper disco-cellular nervule ; one above, and one below, cell ; and five minute ones in a very irregular discal row about middle (interrupted widely about the branching of median nervure), of which only the first, fourth, and fifth are distinct ; hind margin with a rather narrow, well-marked, unspotted black border. Under side :—Hind wing and apical area of fore wing, cream-colour dusted finely with grey: Fore wing :—A narrow edging of cream-colour along costa ; spots as on upper side, with the addition of a black dot on costa at base ; ground colour paler, more glossy, inclining to pink ; apical and hind-marginal cream-colour crossed by conspicuous internervular orange rays, of which the longest is between subcostal nervure and upper radial ; nervules and hind margins more finely and thinly defined with black than on upper side, particularly the latter. Hind wing :—Black spots better defined than on upper side, especially those of median transverse row, an additional one on costa near base ; another on inner-margin near base ; and two between submedian nervure and inner margin a little before termination of median row ; a very thin hind-marginal black edging line preceded at a little distance by an equally thin festooned line ; the space between these two lines is clear cream-colour, without irroration, but is crossed by the very fine black nervular lines ; before the festooned line, a row of eight conspicuous cuneate orange markings of about equal size, the eighth interiorly becoming pink ; other dispersed pink markings, irregular in form and size, before middle, *viz.*, one on

costa at base; two above, one in, one at extremity, one beyond, and two below discoidal cell; and a long ray along inner margin.

This very distinct *Acræa* exhibits affinities with *A. Nohara*, Boisd., *A. Doubledayi*, Guér., and *A. Anacreon*, mihi; its upper surface colouring and markings resembling those of the first named; its markings generally that of the second; and its under surface colouring that of the third. From all three, and indeed from all the other *Acrææ* that I have examined, it may readily be recognised by the two peculiar diaphanous spots immediately following the costal transverse macular black bar beyond the middle of the fore wings. The singularly minute black spots of the hind wings are also a very marked character in *A. fenestrata*.

A single male of this butterfly was contained in the collection purchased by the South-African Museum in 1879 from Mr. T. Ayres. It is noted in Mr. Ayres's list as having been captured in the Leydenburg district of the Transvaal. There are two males in the Hewitson Collection of the British Museum labelled "Transvaal," and Mrs. Monteiro possesses another, taken at Delagoa Bay.

SATYRINÆ.

LEPTONEURA, Wallgrn.

Leptoneura Oxylus, n. s.

Leptoneura Clytus (Linn.), var. A, Trimen, Rhop. Afr. Aust., ii. p. 194 (1866).

Exp. al. 2 in. $7\frac{1}{2}$ — $9\frac{1}{3}$ lin.

♂. Brown, strongly glossed with a bronzy lustre of mingled reddish and greenish; fore wing with pale-creamy macular transverse submarginal stripes. Fore wing:—A transverse, exteriorly convex, interiorly strongly-dentate, pale-creamy macular stripe, from costa just beyond middle to anal angle; of this stripe the upper portion is rather narrow and uninterrupted, but the lower portion is broader and consists of three spots more or less completely separated from the upper portion and from each other; close to apex a short, much curved, unbroken, wider stripe of the same colour, from near costa to third median nervule—along which, by a very thin ray, it is united to the preceding stripe; touching inner edge of this short stripe are three rather

small, more or less confluent, black ocelli with widely blue-clouded white pupils, bounded interiorly by a thin creamy-yellow line; along hind margin a rather narrow ill-defined whitish border, separated by a brown streak from apical pale-creamy stripe; and traversed longitudinally by another brown streak close to hind-marginal edge. Hind wing:—Beyond middle, between second subcostal nervule and submedian nervure, a curved transverse row of five conspicuous black ocelli, with bluish white pupils, in pale fulvous rings; of these ocelli the fifth is much smaller than the rest, and often bipupillate; a narrow hind-marginal border of a paler brown than the ground colour, traversed by a dark brown streak close to hind-marginal edge. Under side:—Rather paler, less glossy. Fore wing:—The creamy bands whiter—the inner one considerably narrowed, its upper portion more irregular, and sometimes even interrupted, its lower macular portion with the two lower spots very much reduced or obsolete; the inner edge of this stripe is defined by a dentate stria darker than the ground colour; in discoidal cell, a little beyond its middle, a slightly-angulated dark brown transverse stria, preceded by a shorter striate marking, sometimes broken into two small spots. Hind wing:—A very short dark stria (or two small spots) in discoidal cell near base; two irregular dark transverse striae from costal to submedian nervure,—one before, the other about, middle,—of which the first is exteriorly edged with some indistinct whitish scales; outer stria much more irregular than the inner; ocelli as above, but their pupils smaller, their rings yellow, narrower, and enclosed in thin outer rings of dark brown,—and the black containing traces of a very thin bluish crescent; two additional, rather duller, but similar ocelli near costa, before the others; both interiorly and exteriorly the ocelli are bounded by some whitish or whitish violaceous clouding.

This fine form of *Leptoneura* seems to be sufficiently distinct from *L. Clytus*, Linn., to be ranked as a separate species. The female still remains unknown to me, but, considering how rarely that sex of *Clytus* proper is taken, in comparison with the very numerous males, this is perhaps not to be wondered at in the case of a form that appears to be very local. The male *L. Oxylus* differs from *L. Clytus* in the following respects,

viz.:—(1) its much larger size, *Clytus* not expanding above $2\frac{1}{2}$ inches, and being generally not more than 2 in. 4 lin. across the wings; (2) its paler colouring throughout; (3) the proportionally smaller and invariably triple ocellus of fore wing, which in *Clytus* is very rarely more than double, and, in the instances where it is triple, the lowest (or third) factor of the compound ocellus is small or minute; (4) the greater width of the creamy stripe beyond this ocellus; (5) the whitish hind marginal border of fore wing; (6) the more irregular and broken character of the macular creamy stripe across disc of fore wing; (7) the more distinct ocelli of hind wing, and their conspicuous pale fulvous (instead of dull fulvous) rings; (8) on the under side of the hind wing the ocelli are much blacker and their yellow rings much brighter; while (9) the two dark striz are very much less irregular, the outer one projecting farthest from base on the radial nervure, so that the space between the striz is widest at that point, instead of on the third median nervule; and (10) the whitish edging of the striz is either wanting or very faintly present, and the basal broken stria of *Clytus* is all but obsolete. A structural difference is noticeable in the antennæ, which are proportionally shorter in *Oxylus*; they are also of a paler and more yellowish rufous.

Colonel Bowker sent this butterfly from Butterworth, Kaffraria Proper, as long ago as 1861, and afterwards from the Bashee River in the same Territory. Mr. W. S. M. D'Urban informed me that he had noticed this large "Variety A" of *L. Clytus* in the then Colony of British Kaffraria; but it was not until March, 1875, that Colonel Bowker succeeded in taking specimens on the west bank of the Kei River, in the Division of East London. I have not heard of the butterfly occurring in Natal, or elsewhere in South Africa than within the limited range indicated.

NYMPHALINÆ.

CRENIS, Bois.

Crenis Morantii, n. s.

Exp. al. 2 in. 1 lin. (female).

♀. Dull ochreous-brown; the fore wing with a darker space and some pale dull yellow-ochreous marks. Fore wing:—A fuscous-brown space, near costa, about

and beyond middle, forming an ill-defined cloud, commencing immediately beyond extremity of discoidal cell; this cloud encloses a yellow-ochreous spot a little beyond cell, and is bounded externally towards apex by an elongate paler spot close to costa, and between third and second median nervules by a smaller similar spot ill-defined outwardly; towards hind margin the ground colour is paler and very faintly tinged with yellow-ochreous (except near apex); a submarginal row of very indistinct internervular small fuscous-brown spots. Hind wing:—Very faintly tinged with yellow-ochreous about apex, near which are two faint fuscous-brown dots. Under side:—Hind wing and apical area of fore wing cream-colour, inclining to argillaceous. Fore wing:—Yellow-ochreous, becoming much paler beyond middle; fuscous-brown cloud very conspicuous, and the ochreous spot it encloses larger and better defined than on upper side; the two outer spots, on the contrary, much less distinct, and quite merged in the ground colour; costa from base narrowly bordered with dull cream-colour; submarginal row of seven small fuscous spots; a little before it, near costa, a curved row of three black dots; Hind wing:—three transverse thin brownish-rufous striæ, the first and second (respectively before and about middle) very irregular and interrupted, the third (near hind margin) regular and lunulated; between the second and third striæ a row of seven contiguous ocelli, centred with a black and yellow dot, and ringed with brownish rufous; of these the middle (fourth) one is smallest and more indistinct than the rest; a small brownish-rufous striola at extremity of discoidal cell; between it and the first ocellus some slight fuscous irroration.

This species is nearly allied to both *C. natalensis*, Boisd., and *C. madagascariensis*, Boisd. From the former it differs, on the upper side, in its very much darker colouring and exceedingly ill-defined marking, wanting alike the warm yellow-ochreous ground colour in both wings, and the black spots and lunules in the hind wings; while on the under side it is cream-colour, with rufous markings, instead of hoary, clouded with fuscous-grey and with fuscous markings; and the fore wing altogether wants the suffused spot near posterior angle, so conspicuous in *C. natalensis*.

From *C. madagascariensis* it diverges almost similarly, as regards the upper side, in its want of warm ochreous

colouring; and its vague fuscous-brown space (enclosing an ochreous spot) is altogether different from the broad dark apical area, which, in *C. madagascariensis*, is only varied by the bar of three small indistinct ochreous spots from costa, not far from apex. On the under side, *C. Morantii* has none of the hoary colouring of the Malagasy species, and all its striæ and ocelli are much more distinct, besides being rufous instead of dull grey; while in the hind wing the central and submarginal striæ are more irregular and dentated.

The only example of this insect that I have met with is the female above described, which was taken at Pinetown (Natal) in April or May, 1869, by Mr. Walter Morant, an able observer and collector, after whom I have named the species. Mr. Morant wrote that the specimen in question settled on the trunks of trees, with closed wings, in the same manner as *C. natalensis*, and that he believed he had seen, if not taken, a male nearly resembling it.

SALAMIS, Boisd.

Salamis nebulosa, n. s.

Exp. al. 2 in. 6 lin. (male); 2 in, 9 lin.—3 in. 1 lin. (female).

♂. Iridescent whitish, with fuscous markings. Fore wing:—A well-defined pale bluish grey basal cloud reaching as far as middle of discoidal cell; upper discocellular nervule with a thin curved fuscous mark; apical area widely fuscous, from costa a little beyond end of cell to end of second median nervule on hind margin; inner edge of this apical patch irregularly excavated; near apex three white spots, of which the second (close to subapical projection) is divided by a transverse fuscous streak, and the third is indistinct; lower portion of hind-marginal fuscous narrowly continued to posterior angle by rather suffused hind-marginal and submarginal fuscous streaks; near the inner of these streaks, between second median nervule and submedian nervule, two fuscous spots, rather large, obliquely placed, and slightly suffused. Hind wing:—A basal grey suffusion, narrower and less distinct than in fore wing; immediately before hind margin a parallel fuscous streak; preceding which is a lunulate, suffused, fuscous streak, becoming irregular and less distinct in its lower portion, but with the outer streak enclosing six more or less ill-

defined whitish marks; a little before apex, from costa to second subcostal nervule, a large elongate fuscous marking, leaving two white spots between it and the submarginal streak; immediately beneath and slightly beyond this marking an obscure fuscous red-centred pale yellow-ringed ocellus; below this some greyish irroration, extending to anal angle, but interrupted between second and first median nervule by a conspicuous red, blue-pupilled, black-clouded, yellow- and black-ringed ocellus; the trace of a faint grey line from costa, about middle, straight to before anal angle or inner margin, where it becomes darker but suffused. Under side:—Duller, iridescence much fainter, very thinly irrorated with fuscous, except about a central band; the fuscous markings only indicated by a greyer tint; near bases a common double transverse irregular stria (indistinct in hind wing) from costal nervure of fore wing to submedian nervure of hind wing; also a common fuscous streak from first median nervule of fore wing to inner margin near anal angle of hind wing. Fore wing:—A very short thin transverse stria in cell close to base; a double stria, closing cell, from costa to below first median nervule, where its outer edge joins the common fuscous streak; fuscous spots near hind margin and posterior angle represented by two imperfect fuscous ocelli in white rings; another similar (or more imperfect) ocellus near subapical projection. Hind wing:—The two ocelli equally distinct and well coloured, but the lower one the larger; anal-angular termination of submarginal streak enlarged and conspicuously fuscous.

♀. Like the male, but with all the fuscous markings broader. Fore wing:—Basal grey ill-defined, or almost obsolete; common fuscous streak of under side usually more or less distinctly marked, interrupted, commencing on subcostal nervure a little beyond cell, and sharply angulated on third median nervule; an additional small white spot immediately beyond the first in apical fuscous; the two large black discal spots usually so suffusedly increased as to be confluent with the hind-marginal fuscous, and so enclosing three or four whitish spots. Hind wing:—The common streak distinct; other markings much as in male; the upper ocellus more obscured with fuscous. Under side:—Duller, much more closely irrorated than in male, inclining to yellowish (in one example very pale sandy brownish). Hind wing:—The

ocelli remarkably smaller, rather ovate than circular, much duller in colouring.

The subapical projection of the fore wing is considerably longer in the female than in the male.

This butterfly is nearly related to *S. Anacardii*, L. It is distinguished by its smaller size (especially in the male, where it is very remarkable); white, instead of greenish, ground colour; much duller iridescence, and great development of the dark markings, especially in the apical area of the fore wings; while the under side is conspicuously duller and less metallic, more irrorated, without white variegation, and with uncoloured and almost obsolete ocelli in the fore wing. In outline the projections of both wings are much shorter and blunter, especially in the male.

In several of the characters noted, *S. nebulosa* approaches the Madagascarene *S. Dupræi*, Vinson, but it altogether wants the long anal-angular tail of the hind wing so conspicuous in that species, and has much larger dark markings in the hind wing; while the blunt subapical projection of the fore wing is totally different from the long process so conspicuous in *S. Dupræi*.

Three specimens of this butterfly—a male and two females—were taken near St. Lucia Bay, in Zululand, by the late Colonel H. Tower, in the year 1867, and presented to me by him in the following year. It was not until 1878 that I saw another example, Colonel J. H. Bowker having, in November of that year, forwarded to the South African Museum a female found by him in a collection of insects made at D'Urban, Natal, by a resident there. Colonel Bowker has recently sent me a male captured by himself in the neighbourhood of D'Urban.

Mrs. Monteiro's collection contains a fine female taken at Delagoa Bay; and there are three specimens in Mr. Henley Grose Smith's collection, which were sent, I believe, from some part of Tropical Eastern Africa.

LYCÆNIDÆ.

LYCÆNESTHES, Moore.

Lycænesthes livida, n. s.

Exp. al. 1 in.—1 in. 3 lin.

♂. Shining greyish brown, with a cupreous gloss; in both wings a very pale greyish blue suffusion from

base. Fore wing:—The suffusion vaguely occupies the lower half of discoidal cell, and covers space between median nervure and its first nervule and inner margin to near posterior angle; an indistinct dark grey lunular mark at extremity of discoidal cell. Hind wing:—The suffusion covers middle field of wing from base, leaving the costa and apical, hind-marginal, and inner-marginal border free; an indistinct dark lunule at extremity of discoidal cell; a little beyond it a curved macular streak between second subcostal and second median nervules; a thin black line on hind-marginal edge; within it a thin white line, most apparent near anal angle, itself immediately preceded by four to six thin whitish lunules, which join with it to isolate spots of the ground colour; these spots are darker near anal angle, that between second and first median nervules being black, bounded interiorly by a well-marked orange lunule. Cilia in both wings whitish. Under side:—Soft pale grey; the markings slightly darker, but distinctly edged on both sides with whitish; in each wing a roughly 8-shaped mark at extremity of discoidal cell, a discal inferiorly-incurved row of more or less confluent similar imperfect rings; a submarginal row of lunules: and a thin hind-marginal whitish edging line. Fore wing:—Basal area quite spotless as far as extremity of cell. Hind wing:—Near base, just below costal nervure, a small but distinct round black spot in a whitish ring; the hind-marginal black spot between second and first median nervules, and a smaller similar spot close to anal angle, conspicuously spangled with a few greenish-silvery scales, and interiorly bounded by an orange lunule; between these two spots a few greenish silvery scales.

♀. Similar to male, but ground colour paler and duller, while the blue suffusion is considerably brighter in hue. Hind wing:—Blue becoming very faint on disc, which bears a transverse row of rather indistinct whitish lunules. Under side as in male.

This *Lycenesthes* is in several respects intermediate between *L. Liodes*, Hew. (the *Emolus* of my 'Rhop. Afr. Aust.' pt. ii. p. 234, pl. 4, figs. 8, 9, apparently not the true *Emolus* of Godart), and *L. Otacilia*, mihi (Trans. Ent. Soc. Lond., 1868, p. 90). It is at once to be distinguished, however, from both species by the singularly pale and dull hue of the bluish suffusion on its upper surface, which in the male contrasts remarkably

with the universal dark purple of *L. Liodes*, and the well-defined bright violaceous of *L. Otacilia*. In size *L. livida* is larger than *L. Liodes*, and very much larger than *L. Otacilia*. The female has, on the upper side of the fore wing, none of the fuscous spots so strongly marked in the female *L. Liodes*. The under side markings are in both sexes less irregular, and not so dark as in *L. Liodes*, and the ground colour has none of the yellowish brown tinge observable on the under side of *L. Otacilia*.

I first noticed this butterfly in Mrs. Barber's collection in February, 1870, and made a description of the two female specimens which the collection contained, under the impression that they would probably prove to be the female of *L. Otacilia*, mihi. These examples were taken at Highlands, near Grahamstown, and were kindly presented to me by Mrs. Barber. On the 23rd of the same month I captured, at Uitenhage (on Cannon Hill), three males of a *Lycænesthes*, which so closely corresponded with the females mentioned that, upon subsequent comparison, no doubt could be entertained of the identity of species. The males in question were flitting about and settling on the twigs of some bushes at the summit of the hill.

I have not seen any further examples of this dull-coloured Lycænid in the collections that I have been able to examine.